

# Atlantic Richfield Company

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**Anthony R. Brown**  
Project Manager, Mining

March 10, 2017

Lynda Deschambault  
Remedial Project Manager, Superfund Division  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street, 10<sup>th</sup> Floor (SFD 7-1)  
San Francisco, California 94105

**Subject: Response to U.S. EPA Comments Dated February 8, 2017, on Atlantic Richfield's Surface Water Technical Data Summary Report and Response to U.S. EPA and LRWQCB Comments on Atlantic Richfield's Evaluation of Historical and RI/FS Surface Water Data**  
Leviathan Mine Site  
Alpine County, California

Dear Ms. Deschambault:

Atlantic Richfield Company (Atlantic Richfield) has received the U.S. Environmental Protection Agency's (U.S. EPA's) letter dated February 8, 2017, which provides comments on our *Surface Water Technical Data Summary Report and Response to U.S. EPA and LRWQCB Comments on the Evaluation of Historical and RI/FS Surface Water Data, Leviathan Mine Site, Alpine County, California* (dated March 14, 2016). This document was submitted in partial fulfillment of the requirements of the Statement of Work attached to the *Administrative Order for Remedial Investigation and Feasibility Study, Comprehensive Environmental Response, Compensation, and Liability Act Docket No. 2008-18* issued by the U.S. EPA on June 23, 2008.

The U.S. EPA requested that Atlantic Richfield provide a response within 30 days stating that Atlantic Richfield concurs with the comments and will incorporate them as requested or identifying any comments that Atlantic Richfield disagrees with, does not concur with, or will not incorporate into the next version of the Surface Water Technical Data Summary Report (Surface Water TDSR). In general, Atlantic Richfield has no significant objections to the comments or to incorporating the comments and the additional work requested into the next version of the Surface Water TDSR; however, we do feel that clarification to several of the comments is necessary. We believe that these issues can be addressed in the final version of the Surface Water TDSR to be submitted in December 2017. Our clarifications fall into the following general categories, which both the U.S. EPA and/or the Lahontan Regional Water Quality Control Board mention in one or more comments:

1. **Summary of previous investigations and abatement measures.** Atlantic Richfield has presented a thorough evaluation of historical surface water data collected since 2001 prior to the commencement of the Remedial Investigation/Feasibility Study (RI/FS). Section 8.0 of the March 14, 2016 submittal of the Surface Water TDSR provides a detailed comparison of the historical data to RI/FS data collected since 2012 to provide context for the RI/FS. This evaluation will be updated to include RI/FS data collected in 2014,



2015, and 2016 in the next version of the Surface Water TDSR. It should also be noted that the RI/FS evaluation will be focused on current conditions per U.S. EPA guidance and the NCP.<sup>1</sup> Prior investigations provide context for the RI, but detailed quantitative analysis of historical data, particularly data that is not representative of current conditions, is not a necessary or required component of the RI/FS.

2. **Comments about non-conservative screening.** Atlantic Richfield is developing threshold reference concentrations for surface water following the approach outlined in the Final Reference Area Focused Remedial Investigation Work Plan. U.S. EPA requested comparisons to maximum proxy reference metal concentrations in the Mine Waste TDSR because a complete analysis of reference concentrations was not available at the time the report was prepared. As with other media, suitable reference data for surface water will be available following the receipt of 2016 sampling data and will be used for data screening in the Surface Water TDSR.
3. **Comments about the uncaptured portion of Delta Seep.** Assertions regarding the uncaptured portion of Delta Seep are overstated and fail to acknowledge that data collected from investigations of surface water-groundwater interactions in On-Property reaches of lower Leviathan Creek are ongoing. Specifically, sampling results from investigations performed along lower Leviathan Creek in 2016 are not yet available. Also, at the time the Delta Seep capture system was designed and constructed, it was recognized that at least some of the visible uncaptured flow in the area of the Delta Seep is not groundwater emerging from the Delta Slope, but rather alluvial flow from the Leviathan Creek channel that should not be collected and treated as part of the early response action. There is not an observed decrease in pH in Leviathan Creek below this discharge or seepage flow. As a result, Atlantic Richfield does not consider uncertainties related to the source of seepage at or adjacent to Delta Seep to be a data gap relative to the completion of the RI/FS.
4. **Comments about the interruption of Channel Underdrain capture and treatment in August 2006.** U.S. EPA Comment S8 and LRWQCB Comment 12 refer to a statement in the Surface Water TDSR that "Atlantic Richfield has been seasonally capturing and treating waters from the CUD and DS since 2002..." The fact that capture may have been interrupted in 2006 for 9 days out of a treatment season of several months to facilitate conversion of treatment

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<sup>1</sup> See *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA*, OSWER Dir. 9355.3-01 (Oct. 1988) at p. 3-19: "The evaluation of site characteristics should focus on the current extent of contamination and estimating the travel time to, and predicting contaminant concentrations at, potential exposure points." See also 40 C.F.R. § 300.430(d)(4) (risk assessment is intended to characterize "current and potential threats").

operations from one temporary system to another (the current HDS system was operating at the time) not does not change the accuracy of this statement.

5. **Submittal of 2016 Data and Updated Database by June 2017.** In accordance with our March 3, 2017 letter *Follow Up to January 17, 2017 Management Meeting, Remedial Investigation/Feasibility Study Schedule, Leviathan Mine Site, Alpine County, California*, Atlantic Richfield will provide the 2016 datasets with the database update to be submitted concurrent with Draft Site Characterization Report in December 2017, not as requested in June 2017.

If you have any questions or comments, please feel free to contact me at (657) 529-4537 or [anthony.brown@bp.com](mailto:anthony.brown@bp.com).

Sincerely,

Anthony R. Brown  
Project Manager, Mining

cc: Gary Riley, U.S. Environmental Protection Agency, Region 9 – via electronic copy  
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